

In the Claims:

1-17 (Canceled)

18. (New) A device comprising:

a chamber for receiving an object;

an EUV radiation source for directing a beam through a beam path toward the object, the EUV radiation source comprising a laboratory source for EUV radiation;

an optical system for filtering radiation from the EUV radiation source, the optical system having at least one filter for suppressing undesirable spectral components of the radiation and also at least one mirror for spectrally filtering in-band EUV radiation;

a plurality of closable diaphragm apertures located in the beam path, the plurality of closable diaphragm apertures enabling a temporal control of irradiation of irradiation fields that lie on the object and are situated downstream of the diaphragm apertures; and

at least one monitor detector arranged downstream of the optical system in the direction of the beam path, the monitor detector detecting an irradiation dose during irradiation.

19. (New) The device as claimed in claim 18, wherein the object comprises a wafer coated with photoresist and the chamber for receiving the object has a mount for the wafer.

20. (New) The device as claimed in claim 18, wherein the EUV radiation of the laboratory source originates from a thermally emitting plasma.

21. (New) The device as claimed in claim 18, further comprising a thin metal film arranged

in the beam path as a filter for suppressing undesirable visible to VUV radiation.

22. (New) The device as claimed in claim 21, wherein the thin metal film comprises a zirconium film having a thickness of less than 200 nm.

23. (New) The device as claimed in claim 18, wherein the at least one mirror for spectrally filtering the in-band EUV radiation is configured as a multilayer mirror.

24. (New) The device as claimed in claim 18, wherein the at least one monitor detector is situated at a distance from the object to be irradiated, the distance being less than half of a distance between the EUV radiation source and the object to be irradiated.

25. (New) The device as claimed in claim 18, wherein each diaphragm aperture is assigned a separate closure mechanism.

26. (New) The device as claimed in claim 18, wherein each of the diaphragm apertures is arranged in one plane and the irradiation fields that lie on the object through each diaphragm aperture do not overlap.

27. (New) The device as claimed in claim 26, wherein the diaphragm apertures are closable by means of at least one flat slide.

28. (New) The device as claimed in claim 27, wherein the flat slide is arranged such that it

can be displaced in a plane parallel to the plane of the diaphragm apertures and has a contour enabling successive opening or closing of the diaphragm apertures.

29. (New) The device as claimed in claim 28, wherein the flat slide has a staircase-shaped contour enabling a row-by-row opening or closing of the diaphragm apertures arranged in rows.

30. (New) A method for irradiating an object, the method comprising:

directing an EUV radiation beam from a laboratory source;

filtering the EUV radiation beam to suppress undesirable spectral components of the radiation;

spectrally filtering the EUV radiation beam in an in-band EUV range;

detecting a radiation dose during irradiation by the EUV radiation beam; and

interrupting a beam path of the EUV radiation beam by closing ones of a plurality of closable diaphragm apertures, wherein each diaphragm aperture is closed at an instant when the detecting ascertains that the radiation dose corresponds to a desired value.

31. (New) The method as claimed in claim 30, wherein the plurality of closable diaphragm apertures enable temporal control of the irradiation of irradiation fields that lie on an object being irradiated and are situated downstream of the diaphragm apertures, and wherein each diaphragm aperture is closed at the instant when the detecting ascertains that the irradiation dose in the irradiation field assigned to the diaphragm aperture corresponds to a desired value.

32. (New) The method as claimed in claim 31, wherein the detecting is performed by a

plurality of monitor detectors and wherein signals of each monitor detector are added up in a controller and compared with desired values stored there for each diaphragm aperture and, upon reaching the desired value for an irradiation field, the controller drives a drive assigned to the closure of the respective diaphragm aperture.

33. (New) The method as claimed in claim 32, wherein the desired values are generated in automated fashion by the controller.

34. (New) The method as claimed in claim 32, wherein the desired values are generated by the controller on the basis of parameters input by an operator.

35. (New) The method as claimed in claim 32, wherein the desired values are input into the controller by an operator.

36 (New) The method as claimed in claim 35, wherein the number of parameters to be input by the operator is less than or equal to the number of irradiation fields and at least one parameter for characterizing a typical dose for the photoresist to be tested, a parameter for determining the variation range in percent and a parameter for determining the dose profile are input, the variation range defining the range between the highest and lowest value relative to the typical dose and the dose profile defining the change in the dose between two successively closed irradiation fields.

37. (New) A device for the test irradiation of objects coated with photosensitive resists, the

device comprising:

- an EUV radiation source;

- an optical system for filtering radiation from the EUV radiation source;

- a chamber for receiving an object, the object being in a beam path of the radiation;

- means for interrupting the beam path onto the object; and

- at least one monitor detector arranged downstream of the optical system in the direction of the beam path;

wherein:

- the EUV radiation source is a laboratory source for EUV radiation;

- the optical system has at least one filter for suppressing undesirable spectral components of the radiation and also at least one mirror for spectrally filtering radiation in an in-band EUV range;

- the means for interrupting the beam path comprises a plurality of closable diaphragm apertures that enable a temporal control of the irradiation of irradiation fields that lie on the object and are situated downstream of the diaphragm apertures; and

- the at least one monitor detector detects the radiation dose during irradiation.